## **Notes:**

## Plumas capability visit September 18 2019

Present: Brandon Stephens (silviculturist), Ken Neeley (silviculture), Charlie Hiles (timber sale prep, recently transferred from the Tahoe), and Jose Rodriguez (timber sale prep).

We visited units in the Concow/Magalia and Big Bar projects. These salvage and reforestation projects are the result of the 2019 Camp Fire.

## Conclusions from visit:

The Feather River RD is quickly moving toward reforestation of the FS portion of the Camp Fire. Harvest units with lower shrub cover have a low/moderate probability of successful reforestation (including certification) using manual release. However, Big Bar units visited with high shrub cover have a very low probability of reforestation success using manual release methods. In addition, while not visited, 2008 Pit Fire plantations burned over by the 2019 Camp Fire with existing large rooted sprouting shrubs would require herbicide to have any probability of reforestation.

My recommendation is to consider funding existing low shrub areas.

I recommended that the Feather River RD consider producing a document that included both manual methods in areas without sprouting shrubs and herbicides in areas with sprouting shrubs. A comparison of other post fire efforts that used manual release to poor result (2008 Pit Fire and 2007 Moonlight Fire) could help in supporting the use of herbicides for reforestation.

It would be prudent for the District in the future to discuss the potential of using RTRT funds prior to ordering seedlings. In addition, the District should be submitting a grant proposal for one of the National Reforestation grants. This will help pay for seedlings/seed.

Stop 1 Concow salvage unit proposed for reforestation. 80.000 seedlings have been ordered for planting in the spring. Brandon was concerned about having ordered seedlings so soon and the potential for needing site preparation. Stands were being actively logged or had just finished logging. CWKV will be collected (negligible). We discussed the logistics of when to order seedlings relative to the potential for logging and site preparation being needed. Based upon the status of logging on the Concow project it would appear that the District will not need to include site preparation in the logged units and that ordering the seedlings was appropriate.

Reforestation NEPA is still being developed for the larger Big Bar project area. A CE was used to document the reforestation treatments proposed. The District used a CE category that did not allow for herbicides. (This is incorrect. The Wildfire Resilience CE does allow for herbicides. The DM did not authorize herbicides for brush control although it did for NNIS control. We are updating the decision.) We had a lengthy discussion on what types of NEPA can be used to authorize chemical use and the steps needed (proposal to implementation) to accomplish a reforestation project with the use of herbicides. I will provide an example of a CE that authorizes the use of herbicides in R5.

There was concern about fuels. A walk through of the unit showed a low fuel load (~< 15 tons/acre) as a result of whole tree yarding. The short time between fire and harvest resulted in most limbs remaining on the bole and a low merchantability DBH for removal. These two facts resulted in the low fuel load observed.

Shrubs observed within the unit are dominated by established deer brush. Shrub cover is currently less than 15% cover. Resprouting ceanothus and new shrub seedlings will make for poor growth. My notes are not clear on what the proposed manual release radius is on these units. However, the District indicated that they would do a 5-ft radius on the Big Bar units.

We discussed the need to do at least a 5-ft radius manual grub around trees. In addition the presence of established shrubs and new sprouting shrubs would necessitate cutting the shrubs below the root collar to have an effective release treatment. I emphasized that manual release would achieve survival, but had a low probability of achieving plantation certification. That the free to grow requirement would not be achieved using manual hand release.

The 2019 Camp Fire reburned the 2008 Pit Fire. Portions of the Pit Fire had been replanted. The Camp Fire caused high severity losses in the Pit Fire plantations. District personnel indicated that Pit Fire plantations had been hand released and were dominated by shrubs. The District is proposing to replant these areas. It would appear that this 2008 fire and lack of resilience is a good case for more effective release. We discussed what it takes to create resilience within plantations and the need to achieve resistance to fire and drought first.



Stop 2 Big Bar unit 4. We discussed the potential for needing additional site preparation after salvage. Again the lack of smaller or non-merchantable trees would indicate that salvage operations would be sufficient to achieve a low fuels condition. Ceanothus seedlings were evident and were less than 15% cover. Again hand release would be effective in establishing seedlings, but not in achieving a reasonable growth that would provide for achieving resilience.





Stop 3 Big Bar Unit. We stopped at another unit that was dominated by 1-ft tall deer brush. It was clear that hand release would be ineffective in achieving establishment. Shrubs dominated 80% of the understory. This combined with a lack of surviving seed trees would indicate a long period dominated by shrubs. Herbicides would be essential in achieving reforestation in this unit.



Jessica Wright is doing an assisted migration study within Concow units.